PŘÍKAZ K ZACHOVÁNÍ LETOVÉ ZPŮSOBILOSTI

CAA-AD-036/99

Datum vydání: 22. března 1999

LETADLO - PALIVOVÁ NÁDRŽ - KONTROLA

Týká se: letadel Boeing 737-100, -200, -300, -400, a -500, která jsou uvedena v části "Applicability" FAA AD 99-05-12 (příloha tohoto PZZ).

Datum účinnosti: 22. dubna 1999

Provést v termínech: jak je popsáno v FAA AD 99-05-12.

Postup provedených prací: dle FAA AD 99-05-12.

Poznámky: Provedení tohoto PZZ musí být zapsáno do letadlové knihy. Případné dotazy týkající se tohoto PZZ adresujte na ÚCL technický inspektorát - Ing. Toman. Pokud to vyžaduje povaha tohoto PZZ musí být zapracován do příslušné části dokumentace pro obsluhu,údržbu a opravy letadla. Tento PZZ byl vypracován na základě FAA AD 99-05-12.

Ing. Pavel MATOUŠEK Ředitel technického inspektorátu Úřad pro civilní letectví

99-05-12 BOEING: Amendment 39-11060. Docket 98-NM-375-AD.

Applicability: Model 737-100, -200, -300, -400, and -500 series airplanes, on which the center wing tanks are activated; excluding those airplanes equipped with center wing tank volumetric topoff systems, or alternate current (AC) powered center tank float switches; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (f) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct chafing of the float switch wiring insulation in the center fuel tank and the resultant arcing from the wiring to the in-tank conduit, which could present an ignition source inside the fuel tank and consequent fire/explosion, accomplish the following:

- (a) Prior to the accumulation of 30,000 total flight hours, or within 30 days after the effective date of this AD, whichever occurs later, accomplish the requirements of paragraph (b) or (c) of this AD.
- (b) Remove the fueling float switch and wiring from the center fuel tank and perform a visual inspection of the float switch wiring to detect discrepancies (i.e., evidence of electrical arcing, exposure of the copper conductor, presence or scent of fuel on the electrical wires, or worn insulation), in accordance with Part 1 of the Accomplishment

Instructions of Boeing Alert Service Bulletin 737-28A1132, dated December 2, 1998, or Revision 1, dated January 15, 1999. Pay particular attention to the wire bundle where it passes through the wing pylon vapor seals and under the wire bundle clamps.

- (1) If no discrepancy is detected, prior to further flight, accomplish either paragraph (b)(1)(i) or (b)(1)(ii) of this AD.
 - (i) Measure the resistance between the wires and the float switch housing, in accordance with the alert service bulletin.
 - (A) If the resistance is less than 200 megohms, prior to further flight, replace the float switch with a new float switch, and install double Teflon sleeving over the wiring of the float switch, in accordance with the alert service bulletin; except, if the replacement float switch and wiring are not available, prior to further flight, accomplish the requirements specified in paragraphs (c) and (d) of this AD.
 - (B) If the resistance is greater than or equal to 200 megohms, prior to further flight, blow dirt out of the conduit, install double Teflon sleeving over the wiring of the float switch, and reinstall the existing float switch, in accordance with the alert service bulletin.
 - (ii) Replace the float switch and wiring with a new float switch and wiring, and install double Teflon sleeving over the wiring of the float switch, in accordance with the alert service bulletin; except, if the replacement float switch and wiring are not available, prior to further flight, accomplish the requirements specified in paragraphs (c) and (d) of this AD.
 - (2) If any worn insulation is detected, and if no copper conductor is exposed, and if no evidence of arcing is detected; accomplish the requirements specified in either paragraph (b)(1)(i) or (b)(1)(ii) of this AD.
 - (3) If any electrical arcing or exposed copper conductor is detected, prior to further flight, accomplish either paragraph (b)(3)(i) or (b)(3)(ii) of this AD.
 - (i) Replace any section of the electrical conduit where the arcing occurred with a new section, in accordance with the alert service bulletin, and accomplish the requirements specified in paragraph (b)(1)(ii) of this AD.
 - (ii) Perform a visual inspection to detect fuel leaks of the electrical conduit, in accordance with the alert service bulletin.
 - (A) If no fuel leak is detected, prior to further flight, accomplish the requirements specified in paragraph (b)(1)(ii) of this AD. Repeat the inspection required by paragraph (b)(3)(ii) of this AD thereafter at intervals not to exceed 1,500 flight hours, until the replacement required by paragraph (b)(3)(ii)(B) of this AD is accomplished.
 - (B) If any fuel leak is detected, prior to further flight, replace any section of the electrical conduit where the leak is with a new section, in accordance with the alert service bulletin. Prior to further flight after accomplishment of the replacement, accomplish the requirements specified in paragraph (b)(1)(ii) of this AD. Accomplishment of electrical conduit replacement constitutes terminating action for the repetitive inspection requirements of paragraph (b)(3)(ii)(A) of this AD.
 - (4) If any presence or scent of fuel on the electrical wires is detected, prior to further flight, locate the source of the leak and replace the damaged conduit with a new conduit, in accordance with the alert service bulletin; and accomplish the requirements specified in either paragraph (b)(1)(i) or (b)(1)(ii) of this AD, unless accomplished previously in accordance with paragraph (b)(1), (b)(2), or (b)(3) of this AD.
- (c) Accomplish the requirements specified in either paragraph (c)(1) or (c)(2) of this AD, in accordance with Part 2 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-28A1132, dated December 2, 1998, or Revision 1 dated January 15, 1999.
 - (1) Deactivate the center tank float switch (i.e., cut the two wires for the float switch at the splices on the front spar and cap and stow the four wire ends);

paint a Caution that shows a conservative maximum fuel capacity for the center tank on the underside of the right-hand wing near the fueling station door; and install an INOP placard on the fueling panel.

- (2) Deactivate the center tank float switch (i.e., cut, stow, and splice the two wires for the float switch at the splices on the front spar), and paint a Caution that shows a conservative maximum fuel capacity for the center tank on the underside of the right-hand wing near the fueling station door.
- (d) For airplanes on which the requirements specified in paragraph (c) of this AD have been accomplished: Accomplish the requirements specified in paragraph (d)(1), (d)(2), and (d)(3) of this AD.
 - (1) Operators must ensure that airplane fueling crews are properly trained in accordance with the procedures specified in Boeing Telex M-7200-98-04486, dated December 1, 1998, or procedures approved by the FAA. This one-time training must be accomplished prior to utilizing the procedures specified in paragraph (d)(3) of this AD.
 - (2) Prior to fueling the airplane, perform a check to verify that the fueling panel center tank quantity indicator is operative. Repeat this check thereafter prior to fueling the airplane. If the fueling panel center tank quantity indicator is not operative, prior to further flight, replace the fueling panel center tank quantity indicator with a serviceable part.
 - (3) One of the two manual fueling procedures for the center fuel tank must be used for each fueling occurrence, in accordance with Boeing Telex M-7200-98-04486, dated December 1, 1998, or a method approved by the FAA.
- NOTE 2: For the purposes of this AD, the term "the FAA," is defined in paragraph (d) of this AD as "the cognizant Principal Maintenance Inspector (PMI)."
- NOTE 3: Where there are differences between the Boeing Alert Service Bulletin 737-28A1132 and this AD, the AD prevails.
- (e) Dispatch with the center fuel tank float switch deactivated, in accordance with Boeing Alert Service Bulletin 737-28A1132, dated December 2, 1998, or Revision 1, dated January 15, 1999, is allowed until replacement float switches and wiring are available for installation. Where there are differences between the Master Minimum Equipment List (MMEL) and the AD, the AD prevails.
- (f) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA PMI, who may add comments and then send it to the Manager, Seattle ACO.
- NOTE 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.
- (g) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.
- (h) Except as provided by paragraphs (d)(1) and (d)(2) of this AD, the actions shall be done in accordance with Boeing Alert Service Bulletin 737-28A1132, dated December 2, 1998; Boeing Alert Service Bulletin 737-28A1132, Revision 1, dated January 15, 1999; and Boeing Telex M-7200-98-04486, dated December 1, 1998, as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.
- (i) This amendment becomes effective on March 18, 1999.

FOR FURTHER INFORMATION CONTACT:

Dorr M. Anderson, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Transport Airplane Directorate, Sea Washington 98055-4056; telephone (425) 227-2684; fax (425) 227-1181.	attle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton